# Stainless Steel Straight Trim (304 & 316) - ESS / ESF

## **Product Description**

Genesis ESS is Straight Edge profile designed to protect the edge of the floor or wall covering. ESF has a specially punched flange which allows the profile to be formed by hand allowing curves to be created.

These profiles offer superb resistance to principal chemical and atmospheric agents and are particularly recommended to protect steps in zones such as food processing industries, breweries, dairies, hospitals and external applications.

Its smooth and non-porous surface makes it especially difficult for the adhesion and survival of bacteria and/or other microorganisms.

Genesis Stainless Steel profiles in finish 84 are supplied polished with a clear transparent film for added protection, before, during and after application - as standard.

## **Dimensions and Colour**

Both available in 10mm, 12mm and 15mm depths and 2.5m lengths in a polished or brushed Stainless Steel Finish.

ESS only is also available in 4.5mm, 6mm, 8mm and 22.5mm depths.

## Range



20mm

ESS045, ESS060, ESS080, ESS/EFA100, ESS/EFA120, ESS/EFA150, ESS180 and ESS225 profiles are manufactured from Grade 304 Stainless Steel.

ESS310 and ESS312 profiles are manufactured from Grade 316 Stainless Steel.



## Maintenance

Advanced Cleaning for Stainless Steel Discoloration.

#### Tarnish or Water Stains:

The first stage of corrosion is completely on the surface and is easily removed by most commercial metal polishes. Discoloration will be greater at indoor facilities due to the chlorine vapor trapped in an inside environment.

#### Lightning Rusting:

Rust is visible at this stage but little or no pitting has yet occurred. A stronger cleaning agent, such as Simichrome Polish, is required.

#### Heavy Rusting:

A deep coat of rust with surface pitting can develop if corrosion has been left unchecked for a long time. For advanced corrosion naval jelly is recommended.

#### Surface Restoration:

To remove or reduce pitting damage caused by corrosion has been left unchecked for a long time. Scotchbrite works well for this purpose. Work only in the direction of the existing grain and never use steel wool.

## Installation:

- 1. Select profile according to tile thickness.
- 2. Trowel tile adhesive over the area that forms the perimeter of the tiled covering.
- 3. Press the perforated anchoring leg of the ESS / ESF, into the tile adhesive and align, mechanical fix if required
- 4. Trowel additional adhesive over the perforated anchoring leg to ensure full coverage.
- Solidly embed the tiles so that the tiled surface is flush with the top of the profile (the profile should not be higher than the tiled surface, but rather up to approx.
  1 mm lower).
- 6. Fill the joint completely with grout.



## **Technical Details**

Stainless Steel is a corrosion resistant chromium/ nickel alloy steel that is strong and durable with excellent lustre. However, it is not rustproof, particularly in the harsh environment of a swimming pool. Chlorine and bromine used for sanitization are highly caustic chemicals for stainless steel and heat and humidity enhance the corrosiveness of these chemicals. Regular cleaning is the best way to prevent corrosion and add to the service life for your profiles and any other stainless steel equipment. The goal of your cleaning and maintenance program should be to keep the stainless steels protective Chromium oxide layer intact. This is what prevents corrosion. Varying Stages of contamination.

Stainless Steel AISI 304 / DIN1.4301 Surface BA1		Stainless DIN1.443	Steel AISI 316 6 Surface 2B	
C%	0.2-0.6	С%	0.03	
Mn%	2.0	Mn%	2.0	
Si%	0.1	Si%	0.75	
P%	0.75	P%	0.045	
S%	0.045	S%	0.03	
Cr%	0.03	Cr%	-18	
Ni%	18-20	Ni%	10-14	
N%	10.5	N%	0.1	
		Мо	2-3 Max	

Stainless Steel application in a swimming pool, leisure pool and more especially hydrotherapy type pools where temperatures and humidity's are likely to be even higher than modern larger "municipal" Leisure pool buildings.

Types 201,304,316 and 321 are widely used and have given excellent service when properly maintained; type 316 is preferred for its greater resistance to staining, pitting and crevice corrosion for the following applications:

- Fully immersed or drenched every session, e.g. pool ladders, pool side rails, some diving board structures;
- Only Splashed with pool water but neither safety-critical nor loadbearing – e.g. changing room fittings, lockers etc;
- In the pool hall atmosphere but neither safety-critical nor load-bearing – e.g. Wall decorative paneling;
- Remote from the influence of the pool hall atmosphere e.g. café and entrance lobby fittings;

Components which are in the pool hall atmosphere, which are safetycritical and load bearing but which are not washed or cleaned frequently, are potentiality vulnerable to stress corrosion cracking (SCC).

Types 201,304,316 and 321 have found to be susceptible to SCC in laboratory tests and in some swimming pool atmospheres and must not be used for components vulnerable to SCC if failure could result in personal injury.

## **General Cleaning and Maintenance**

General Cleaning and Maintenance Suggestion for Stainless Steel **DO NOT:** 

Do not use steel wool or sandpaper, or mineral acids, bleaches or chlorine cleansers.

Do not add chlorine to your pool right next to your stainless steel Add it as far away as possible.

Do not store stainless steel in a closed area underneath steel beams to avoid corrosive condensation from dripping onto to the equipment and leaving brown spots.

Do not store stainless steel where it will attract and retain moisture or airborne contaminants and do not store equipment in the same areas as chlorine.

#### DO:

Rinse off stainless steel when exposed to Chlorine frequently with fresh water to wash away accumulated chemicals such as chlorine and wipe dry with a clean cloth. Especially try to clean immediately after use around chlorides (chlorine powder, seawater, etc.)

Clean frequently with a cleaner and water. Any cleaner that is safe for glass is usually safe for stainless steel.

Inspect frequently, if you notice discoloration, tarnish or water stains, increase the frequency of your fresh water rinses to reduce accumulated chemicals.

Remove any rust spots as soon as possible to prevent irreversible pitting.

Occasionally clean with borax, soda ash, or a non-abrasive commercial cleanser and water.

Stubborn Stains may be removed with a magnesium oxide, ammonia and water paste.

#### Consider the following periodic cleaning program:

1 can of powered cleanser

- 1 Scotchbrite pad
- 1 spray bottle cleaner
- 1 paste automotive wax

#### Directions:

Wet cleaning pad with fresh water (do not use pool water) and apply powered cleanser. Using gentle pressure, rub stained areas in the same direction of the existing polishing grain until stains are removed. Rinse with clean water. Use cleaner de-greaser to remove any stains. Thoroughly dry the stainless then apply wax. Let wax dry to a haze and buff to a shine with a clean dry cloth. Automotive waxes will provide added beauty and protection for your equipment.

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